

GPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Sheu, et al.

Docket No.:

TSM03-0140

Serial No.:

10/619,828

Art Unit:

2814

Filed:

July 15, 2003

Examiner:

Dana Farahani

For:

Self-Aligned MOSFET having an Oxide Region below the Channel

Certificate of Mailing via First Class Mail (37 C.F.R. § 1.8(a))

Date of Deposit:

May 26, 2004

I hereby certify that the below listed correspondence is being deposited with the United States Postal Service on the date indicated above as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Certificate of Mailing via First Class Mail (1 page) Information Disclosure Statement (1 page) Form PTO/SB/08A & 08B with 28 References Cited (2 pages) Copy of 8 References Cited Return Postcard

Respectfully submitted,

Kristy Engeldahl

Kristy Engeldahl

Legal Assistant

Slater & Matsil, L.L.P. 17950 Preston Rd., Suite 1000 Dallas, TX 75252

Tel: 972-732-1001 Fax: 972-732-9218

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicant:

Sheu, et al.

Attorney Docket:

TSM03-0140

Filed:

July 15, 2003

Examiner:

Dana Farahani

Serial No.:

10/619,828

Art Unit:

2814

For:

Self-Aligned MOSFET having an Oxide Region below the Channel

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

The Applicant wishes to bring to the attention of the Patent and Trademark Office the information noted on the enclosed form PTO/SB/08A & 08B that may be considered material to the examination of the above-identified application.

This Information Disclosure Statement is submitted under 37 C.F.R. §1.97(b) as no Office Action on the merits has been received. If any fee is required, please charge any additional amount, or credit any overpayment to Deposit Acct. No 50-1065 of the below mentioned firm.

Respectfully submitted,

May 26, 2004

Date

Steven H. Slater

Attorney for Applicant

Reg. No. 35,361

Slater & Matsil, L.L.P. 17950 Preston Rd., Suite 1000 Dallas, TX 75252 (972) 732-1001 (phone) (972) 732-9218 (fax)

PTO/SB/08A (02-03)
Approved for use through 4/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB

PRADENA Substitute for form 1449/PTO

JUN 0 1 2004

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

a concetion of information unless it di	splays a valid Olvib control number.	
Complete if Known		
Application Number	10/619,828	
Filing Date	July 15, 2003	
First Named Inventor	Sheu, et al.	
Art Unit	2814	
Examiner Name	Farahani	
Attorney Docket Number	TSM03-0140	

	U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.1	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-4,314,269	02-02-1982	Fujiki	· · · · · · · · · · · · · · · · · · ·
	2	US-5,629,544	05-13-1997	Voldman, et al.	
	3	US-5,811,857	09-22-1998	Assaderaghi, et al.	
***************************************	4	US-6,008,095	12-28-1999	Gardner, et al.	
	5	US-6,015,993	01-18-2000	Voldman, et al.	
***************************************	6	US-6,232,163 B1	05-15-2001	Voldman, et al.	
	7	US-6,258,664 B1	07-10-2001	Reinberg	
	8	US-6,294,834 B1	09-25-2001	Yeh, et al.	
	9	US-6,358,791 B1	03-19-2002	Hsu, et al.	
	10	US-2002/0153549 A1	10-24-2002	Laibowitz, et al.	
	11	US-6,475,838 B1	11-05-2002	Bryant, et al.	
	12	US-6,489,664 B2	12-03-2002	Re, et al.	
***************************************	13	US-2002/0190284 A1	12-19-2002	Murthy, et al.	
	14	US-2003/0001219 A1	01-02-2003	Chau, et al.	
•••••	15	US-2003/0030091 A1	02-13-2003	Bulsara, et al.	
	16	US-6,524,905 B2	02-25-2003	Yamamichi, et al.	
	17	US-2003/0080386 A1	05-01-2003	Ker, et al.	
	18	US-6,558,998 B2	05-06-2003	Belleville, et al.	
	19	US-6,621,131 B2	09-16-2003	Murthy, et al.	-
	20	US-6,653,700 B2	11-25-2003	Chau, et al.	

		FOREIC	ON PATENT DOC	JMENTS .		_
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
***************************************	21	WO 03/017336 A2	02-27-2003	Amberwave Systems Corporation		

	<u> </u>					

Examiner	Date	
Signature		. :-
Oignature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸Applicant is to place a check mark here if English

by the appropriate symbols as indicated on the document under VNFO Standard ST. TO II possible. Application is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE duction Act of 1996 Under the Paperwork o persons are required to respond to a collection of information unless it displays a valid OMB

control number. Substitute for form 1449B/PTC

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

2 Sheet of

Complete if Known		
Application Number	10/619,828	
Filing Date	July 15, 2003	
First Named Inventor	Sheu, et al.	
Group Art Unit	2814	
Examiner Name	Farahani	
Attorney Docket Number	TSM03-0140	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the		
Initials*	No.	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue	7	
	 	number(s), publisher, city and/or country where published.	┖	
	22	WANG, L.K., et al., "On-Chip Decoupling Capacitor Design to Reduce Switching-Noise-Induced Instability in CMOS/SOI VLSI," Proceedings of the 1995 IEEE International SOI Conference, Oct. 1995, pp.100-101.		
	23	YEOH, J.C., et al., "MOS Gated Si:SiGe Quantum Wells Formed by Anodic Oxidation," Semicond. Sci. Technol. (1998), Vol. 13, pp. 1442-1445, IOP Publishing Ltd., UK.		
	24	CAVASSILAS, N., et al., "Capacitance-Voltage Characteristics of Metal-Oxide-Strained Semiconductor Si/SiGe Heterostructures," Nanotech 2002, Vol. 1, pp. 600-603.		
	25	BLAAUW, D., et al., "Gate Oxide and Subthreshold Leakage Characterization, Analysis and Optimization," date unknown.		
	26	"Future Gate Stack," International Sematech, 2001 Annual Report.		
	27	CHANG, L., et al., "Reduction of Direct-Tunneling Gate Leakage Current in Double-Gate and Ultra-Thin Body MOSFETs," 2001 IEEE, Berkeley, CA.		
	CHANG, L., et al., "Direct-Tunneling Gate Leakage Current in Double-Gate and Ultrate Body MOSFETs," 2002 IEEE, Vol. 49, No. 12, December 2002.			

Name				
Examiner		Date		
Signature		Considered Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated tot ake 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.